

ABSTRACT

Please delete the Abstract of this application.

Please add the following paragraph to the Abstract:

Techniques capable of selectively affecting and adjusting a volume of neural tissue in the brain, parenchyma of the spinal cord, or a peripheral nerve are disclosed. A lumen having at least one opening at its distal end that is capable of directing a lead outwardly along a predetermined trajectory is preferred. The lumen is capable of accepting a plurality of leads that can project outward in different directions from the distal end of the lumen. The leads have one or more electrodes at its ends and are thereby configured by the lumen in accordance with a predetermined two- or three-dimensional geometry. Anode/cathode relationships may be established between the electrodes by the operator to stimulate the neural tissue surrounding these electrodes. The operator may also adjust the stimulation to selectively stimulate the desired portion of the brain, spinal cord, peripheral nerve. Sensor feedback may be implemented to adjust the treatment therapy.